

## Research Article

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## Annotated list of the Pterygota fauna of Artos Mountain (Van Province, East Turkey)

Muhabbet Kemal<sup>1</sup> Ahmet Ömer Koçak



**Fig. 1** – *Acrocera sanguinea* (Acroceridae), Artos Mountain, northern slopes 1960m 31 7 2015, M. Kemal (Cesa)

<sup>1</sup> Asst. Prof. Dr. Muhabbet Kemal, Yüzüncü Yıl University, Faculty of Science, Dept. of Biology, Campus, Van / Turkey.

e-mail: [muhabbet\\_kemal@yahoo.com.tr](mailto:muhabbet_kemal@yahoo.com.tr)

co-author: Prof. em. Dr. Ahmet Ömer Koçak, c/o Yüzüncü Yıl University, Faculty of Science, Dept. of Biology, Campus, Van / Turkey.

e-mail: [cesa\\_tr@yahoo.com.tr](mailto:cesa_tr@yahoo.com.tr)

**Abstract:** Annotated list of the Pterygota fauna of Artos Mountain (Van Province, East Turkey). *Cesa News* 125: 1-36, 30 figs.

In this paper, an annotated list of the Pterygota species of Artos Mountain (Gevaş district, Van Province, East Turkey) are given. Totally 655 species of 93 families of 11 orders are mentioned. For the first time, numerous species are reported here for the district or province. Two species are recorded as new to Turkey. Observational notes (egg laying, copulating, resting etc) are given with illustrations. Investigation possibilities in the region are discussed.

**Key words:** fauna, Artos, Gevaş, Van, Turkey, Pterygota, *Lepidoptera*, *Argynniidae*, *Hesperiidae*, *Lycaenidae*, *Libytheidae*, *Papilionidae*, *Pieridae*, *Satyridae*, *Arctiidae*, *Brachodidae*, *Cimeliidae*, *Ctenuchidae*, *Drepanidae*, *Ethmiidae*, *Gelechiidae*, *Geometridae*, *Lasiocampidae*, *Lymantriidae*, *Noctuidae*, *Notodontidae*, *Psychidae*, *Pterophoridae*, *Pyrilidae*, *Scythridae*, *Sesiidae*, *Sphingidae*, *Tortricidae*, *Yponomeutidae*, *Zygaenidae*, *Odonata*, *Aeshnidae*, *Coenagrionidae*, *Cordulegasteridae*, *Libellulidae*. *Mantodea*, *Empusidae*, *Irididae*, *Mantidae*, *Dermaptera*, *Forficulidae*, *Orthoptera*, *Acrididae*, *Gryllidae*, *Pamphagidae*, *Tettigoniidae*, *Hemiptera*, *Alydidae*, *Coreidae*, *Cydnidae*, *Gerridae*, *Lygaeidae*, *Miridae*, *Nabidae*, *Pentatomidae*, *Reduviidae*, *Rhopalidae*, *Scutelleridae*, *Stenocephalidae*, *Tingidae*, *Homoptera*, *Cicadidae*, *Dictyopharidae*, *Planipennia*, *Ascalaphidae*, *Mantispidae*, *Myrmeleonidae*, *Nemopteridae*, *Diptera*, *Acroceridae*, *Bombyliidae*, *Chloropidae*, *Dolichopodidae*, *Lauxaniidae*, *Muscidae*, *Nemestrinidae*, *Opomyzidae*, *Platystomidae*, *Sarcophagidae*, *Stratiomyidae*, *Syrphidae*, *Tabanidae*, *Tachinidae*, *Tephritidae*, *Ulidiidae*, *Hymenoptera*, *Andrenidae*, *Apidae*, *Crabronidae*, *Megachilidae*, *Pompilidae*, *Scoliidae*, *Tenthredinidae*, *Vespidae*, *Coleoptera*.

The present list of the Pterygota species of Artos Mountain (placed in the subalpine-alpine zone of southern Van Lake, in the Gevaş district) is a small part of the long-termed faunistical working program of the private Cesa project that we plan to achieve. Totally, 655 species of 93 families of 11 orders are given in this preliminary list. It is expected that Artos mountain is a natural home of more than 4-5000 Pterygota species. In recent years that we began to work here, the known species number was less than 50. The current species numbers of the Pterygota of various districts of Van province (East Turkey) are given in the Table 1 below.

**Table 1** – Number of the species in the six selected districts of Van Province (based upon the info-system of the Cesa)<sup>2</sup> Important publications on the faunal lists are also given in the footnotes.

	Gevaş <sup>3</sup>	Çatak <sup>4</sup>	Gürpınar	Tuşba <sup>5</sup>	Erciş	Başkale	Van Pr. <sup>6</sup>
<b>Lepidoptera</b>	722	633	385	420	78	357	1325
<b>Other</b>	391	221	91	265	55	112	1351
<b>Pterygota</b>							
<b>Total</b>	1113	854	476	685	133	469	2676

This paper is based upon the field studies of the authors, carried out privately in all respects as always, between the years of 2008 and 2015 at irregular intervals. More than 30 excursions were realized to the mountain, but mostly by day. In the last two decades, the authors had very limited investigation possibilities in the remote areas, due to the terrorist activities. Even this year, only some small, restricted areas in Gevaş and Erciş districts may be studied by the authors, as the most parts of the East Turkey have been officially declared as military areas throughout the year.

The present list of Artos Mountain<sup>7</sup> is extracted from the database program, covering the Old World, of the second author. Faunistically, a large number of the species are reported here for the first time for Gevaş district or Van Province. On the other hand, *Acrocera sanguinea* Mg. (*Acroceridae*) and *Ocrisiodes antiopa* Rössler (*Pyrilidae*) are new to the fauna of Turkey.

<sup>2</sup> <http://www.cesa-tr.org/Infos.htm>

<sup>3</sup> Kemal, M. & A.Ö. Koçak, 2016, On the Entomofauna of the eastern slopes of Alacabuk mountain (Gevaş district, Van Province, East Turkey). *Cesa News* 124: 1-31, 74 figs.

<sup>4</sup> Kemal, M. & A.Ö. Koçak, 2016, Annotated and pictorial list of the Çatak Lepidoptera. *Priamus* (Suppl.) 41: 1-118, 95 figs.

<sup>5</sup> Kemal, M. & A.Ö. Koçak, 2014, Illustrated and annotated list on the Entomofauna of Gören Mount (Van Province, East Turkey), with ecological remarks I – Period of April-June 2014. *Priamus* (Suppl.) 33: 5-206, 273 figs. 1 Table.

<sup>6</sup> Koçak, A.Ö. & M. Kemal, 2012, List of two thousand species of pterygot insects in Van Province (East Turkey). *Cesa News* 81: 2-86, 37 figs.

<sup>7</sup> The code of Artos Mountain is 65Fz in the author's database program.

All the photographs and the genitalic preparations are based upon the material from Artos Mt. and belong to the first author. The species listed here were identified by the authors, if not otherwise indicated.

The disposition of the 93 families of the Pterygota listed in the present paper is given as follows; **Lepidoptera** (28 families): Butterflies (7): *Argynnidae*, *Hesperiidae*, *Lycaenidae*, *Libytheidae*, *Papilionidae*, *Pieridae*, *Satyridae*. Moths (21): *Arctiidae*, *Brachodidae*, *Cimeliidae*, *Ctenuchidae*, *Drepanidae*, *Ethmiidae*, *Gelechiidae*, *Geometridae*, *Lasiocampidae*, *Lymantriidae*, *Noctuidae*, *Notodontidae*, *Psychidae*, *Pterophoridae*, *Pyrilidae*, *Scythridae*, *Sesiidae*, *Sphingidae*, *Tortricidae*, *Yponomeutidae*, *Zygaenidae*.

**Odonata** (4): *Aeshnidae*, *Coenagrionidae*, *Cordulegasteridae*, *Libellulidae*. **Mantodea** (3): *Empusidae*, *Irididae*, *Mantidae*. **Dermaptera** (1): *Forficulidae*. **Orthoptera** (4): *Acrididae*, *Gryllidae*, *Pamphagidae*, *Tettigoniidae*. **Hemiptera** (13): *Alydidae*, *Coreidae*, *Cydnidae*, *Gerridae*, *Lygaeidae*, *Miridae*, *Nabidae*, *Pentatomidae*, *Reduviidae*, *Rhopalidae*, *Scutelleridae*, *Stenocephalidae*, *Tingidae*. **Homoptera** (2): *Cicadidae*, *Dictyopharidae*. **Planipennia** (4): *Ascalaphidae*, *Mantispidae*, *Myrmeleonidae*, *Nemopteridae*. **Diptera** (16): *Acroceridae*, *Bombyliidae*, *Chloropidae*, *Dolichopodidae*, *Lauxaniidae*, *Muscidae*, *Nemestrinidae*, *Opomyzidae*, *Platystomidae*, *Sarcophagidae*, *Stratiomyidae*, *Syrphidae*, *Tabanidae*, *Tachinidae*, *Tephritidae*, *Ulidiidae*. **Hymenoptera** (8): *Andrenidae*, *Apidae*, *Crabronidae*, *Megachilidae*, *Pompilidae*, *Scoliidae*, *Tenthredinidae*, *Vespidae*. **Coleoptera** (10): *Buprestidae*, *Cerambycidae*, *Chrysomelidae*, *Cleridae*, *Coccinellidae*, *Curculionidae*, *Glaphyridae*, *Meloidae*, *Scarabaeidae*, *Tenebrionidae*.

## List of the Pterygota species of Artos Mountain

Some habitats of the Artos Mountain was previously illustrated by the authors (Koçak & Kemal, 2008: figs. 1-14; Kemal & Koçak, 2013a, 2013b: figs. 1-4). The list of the 655 species recorded from this mountain is arranged below in alphabetical order.

### Lepidoptera

Totally 442 species of 28 families are listed below.

### Butterflies

First attempt of the butterflies of Artos Mountain was made by the authors (Kemal & Koçak, 2008). Totally 137 species of 7 families are listed below.

### Argynnidae

- 1) *Aglais urticae* (Linnaeus, 1758) (Argynnidae)
- 2) *Argynnis (Pandoriana) pandora* ([Denis & Schiffermüller], 1775) (Argynnidae).  
This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 13).
- 3) *Argynnis (Speyeria) aglaja* (Linnaeus, 1758) (Argynnidae)
- 4) *Brenthis hecate* ([Denis & Schiffermüller], 1775) (Argynnidae)
- 5) *Euphydryas (Eurodryas) aurinia* (Rottemburg, 1775) (Argynnidae)
- 6) *Melitaea (Cinclidia) ornata* Christoph, 1893 (Argynnidae)
- 7) *Melitaea (Cinclidia) phoebe* (Goeze, 1779) (Argynnidae)
- 8) *Melitaea (Didymaeformis) didyma* (Esper, [1779]) (Argynnidae)
- 9) *Melitaea (Didymaeformis) perseus* Kollar, [1849] (Argynnidae)
- 10) *Melitaea (Didymaeformis) syriaca* Rebel, 1905 (Argynnidae)
- 11) *Melitaea (s.str.) arduinna* (Fabricius, 1787) (Argynnidae)
- 12) *Melitaea (s.str.) cinxia* (Linnaeus, 1758) (Argynnidae)
- 13) *Nymphalis xanthomelas* (Esper, [1781]) (Argynnidae)
- 14) *Polygonia (Comma) egea* (Cramer, [1775]) (Argynnidae)

- 15) *Vanessa (Cynthia) cardui* (Linnaeus,1758) (Argynnididae)  
 16) *Vanessa (s.str.) atalanta* (Linnaeus,1758) (Argynnididae)

### Hesperiidae

- 17) *Carcharodus (Lavatheria) lavatherae* (Esper,[1783]) (Hesperiidae)  
 18) *Carcharodus (Reverdinus) flocciferus* (Zeller,1847) (Hesperiidae)  
 19) *Carcharodus (Reverdinus) orientalis* Reverdin,1913 (Hesperiidae). Previously recorded by the authors (Kemal & Koçak, 2008: fig. 8; Kemal & Koçak, 2013b: fig. 17).  
 20) *Carcharodus (s.str.) alceae* (Esper,[1780]) (Hesperiidae)  
 21) *Erynnis (Hesperopegusus) marloyi* (Boisduval,[1834]) (Hesperiidae)  
 22) *Hesperia comma* (Linnaeus,1758) (Hesperiidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 9).  
 23) *Muschampia poggei* (Lederer,1858) (Hesperiidae)  
 24) *Muschampia proteides* (F.Wagner,1929) (Hesperiidae)  
 25) *Pyrgus armoricanus* (Oberthür,1910) (Hesperiidae)  
 26) *Pyrgus carlinae* (Rambur,[1839]) (Hesperiidae)  
 27) *Pyrgus cinarae* (Rambur,[1839]) (Hesperiidae)  
 28) *Pyrgus melotis* (Duponchel,[1834]) (Hesperiidae)  
 29) *Pyrgus serratulae* (Rambur,[1839]) (Hesperiidae)  
 30) *Pyrgus sidae* (Esper,[1784]) (Hesperiidae)  
 31) *Spialia (Neospialia) orbifer* (Hübner,[1823]) (Hesperiidae)  
 32) *Spialia (s.str.) phlomidis* (Herrich-Schäffer,[1845]) (Hesperiidae)  
 33) *Thymelicus lineolus* (Ochsenheimer,1808) (Hesperiidae)

### Libytheidae

- 34) *Libythea (s.str.) celtis* (Laicharting,1782) (Libytheidae)

### Lycaenidae

- 35) *Callophrys danchenkoi* Zhdanko,1998 (Lycaenidae). Alpine species at *Astragalus* zone.  
 36) *Callophrys paulae* Pfeiffer,1932 (Lycaenidae). Sympatric with the previous species.  
 37) *Celastrina argiolus* (Linnaeus,1758) (Lycaenidae)  
 38) *Chilades (Freyeria) trochylus* (Freyer,[1843]) (Lycaenidae)  
 39) *Cigaritis uighurica* Kemal & Koçak,2005 (Lycaenidae)  
 40) *Cupido (s.str.) osiris* (Meigen,[1829]) (Lycaenidae)  
 41) *Glaucopsyche (s.str.) alexis* (Poda,1761) (Lycaenidae)  
 42) *Lampides boeticus* (Linnaeus,1767) (Lycaenidae)  
 43) *Lycaena (Alciphronia) alciphron* (Rottemburg,1775) (Lycaenidae)  
 44) *Lycaena (Heodes) virgaureae* (Linnaeus,1758) (Lycaenidae)  
 45) *Lycaena (Loweia) tityrus* (Poda,1761) (Lycaenidae)  
 46) *Lycaena (Margelycaena) euphratica* (Eckweiler,1989) (Lycaenidae)  
 47) *Lycaena (Palaeochrysophanus) candens* (Herrich-Schäffer, [1845]) (Lycaenidae)  
 48) *Lycaena (s.str.) phlaeas* (Linnaeus,1761) (Lycaenidae)  
 49) *Lycaena (Thersamonia) asabinus* (Gerhard,[1850]) (Lycaenidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 7).  
 50) *Lycaena (Thersamonia) kefersteinii* (Gerhard,[1850]) (Lycaenidae)  
 51) *Lycaena (Thersamonia) kurdistanicus* (Riley,1921) (Lycaenidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: figs. 2, 3).  
 52) *Lycaena (Thersamonia) thetis* (Klug,1834) (Lycaenidae)  
 53) *Phengaris arion* (Linnaeus,1758) (Lycaenidae). Rare, around *Thymus* sp., above 2000m.



- 54) ***Plebejus (Kretania) carmon* (Gerhard,[1851])** (Lycaenidae)  
 55) ***Plebejus (Lycaeides) idas* (Linnaeus,1761)** (Lycaenidae)  
 56) ***Plebejus (Plebejides) nichollae* (Elwes,1901)** (Lycaenidae). Males with pink anal spots on upperside of hindwing are not rare in the area. However, the specific distinctness of *nichollae* is doubtful.  
 57) ***Plebejus (Plebejides) zephyrinus* (Christoph,1884)** (Lycaenidae). At the upper heights of Artos Mountain (ca. 2200m), a female was observed on 22 June 2013 in the morning by the first author during laying an egg on the stem and leaf of tragacanthic *Astragalus* sp. (*Fabaceae*) (**Figs. 2-4**)



**Figs. 2-4** - *Plebejus zephyrinus* (Lycaenidae). Top: Behaviour of egg laying female. Below: Laid egg on the leaf (in nature), and the egg (enlarged), M. Kemal (Cesa)

- 58) ***Plebejus (s.str.) argus* (Linnaeus,1758)** (Lycaenidae)

- 59) ***Polyommatus (Agriades (s.str.)) pyrenaicus*** (Boisduval,1840) (Lycaenidae). An alpine species, rare above 2800m.
- 60) ***Polyommatus (Albulina (Plebejidea)) loewii*** (Zeller,1847) (Lycaenidae)
- 61) ***Polyommatus (Albulina (Vacciniina)) alcedo*** (Christoph,1877) (Lycaenidae)
- 62) ***Polyommatus (Aricia (Eumedonia)) eumedon*** (Esper,[1780]) (Lycaenidae)
- 63) ***Polyommatus (Aricia (s.str.)) agestis*** ([Denis & Schiffermüller],1775) (Lycaenidae)
- 64) ***Polyommatus (Aricia (Ultraaricia)) crassipunctus*** (Christoph,1893) (Lycaenidae)
- 65) ***Polyommatus (s.str. (Agrodiaetus (Actisia))) haigi*** (Dantchenko & Lukhtanov,2002) (Lycaenidae)
- 66) ***Polyommatus (s.str. (Agrodiaetus (Actisia))) pseudactis*** (Forster,1960) (Lycaenidae)
- 67) ***Polyommatus (s.str. (Agrodiaetus (Admetusia))) alcestis*** (Zerny,1932) (Lycaenidae)
- 68) ***Polyommatus (s.str. (Agrodiaetus (Admetusia))) ripartii*** (Freyer,[1830]) (Lycaenidae)
- 69) ***Polyommatus (s.str. (Agrodiaetus (Antidolus))) antidolus*** (Rebel,1901) (Lycaenidae).
- 70) ***Polyommatus (s.str. (Agrodiaetus (Antidolus))) kurdistanicus*** (Forster,1961) (Lycaenidae). This species flies sympatric with *antidolus* Koçak.
- 71) ***Polyommatus (s.str. (Agrodiaetus (Antidolus))) mithridates*** (Staudinger,1878) (Lycaenidae)
- 72) ***Polyommatus (s.str. (Agrodiaetus (Phyllisia))) baytopi*** (De Lesse,1959) (Lycaenidae)
- 73) ***Polyommatus (s.str. (Agrodiaetus (Phyllisia))) igisizilim*** Koçak & Kemal,2001 (Lycaenidae). This species flies sympatric with *baytopi* Lesse, and *iphigenia* H.-S.
- 74) ***Polyommatus (s.str. (Agrodiaetus (Phyllisia))) iphigenia*** (Herrich-Schäffer,[1847]) (Lycaenidae)
- 75) ***Polyommatus (s.str. (Agrodiaetus (Phyllisia))) vanensis*** (De Lesse,1957) (Lycaenidae)
- 76) ***Polyommatus (s.str. (Agrodiaetus (Transcaspianus))) anticarmon*** (Koçak,1983) (Lycaenidae). This species flies sympatric with *turcicus* Koçak.
- 77) ***Polyommatus (s.str. (Agrodiaetus (Transcaspianus))) turcicola*** (Koçak,1977) (Lycaenidae)
- 78) ***Polyommatus (s.str. (Agrodiaetus (Transcaspianus))) turcicus*** (Koçak,1977) (Lycaenidae)
- 79) ***Polyommatus (s.str. (Cyaniris)) bellis*** (Freyer,[1842]) (Lycaenidae)
- 80) ***Polyommatus (s.str. (Lysandra)) bellargus*** (Rottemburg,1775) (Lycaenidae)
- 81) ***Polyommatus (s.str. (Lysandra)) corydonius*** (Herrich-Schäffer,[1852]) (Lycaenidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 4).
- 82) ***Polyommatus (s.str. (Meleageria)) daphnis*** ([Denis & Schiffermüller],1775) (Lycaenidae)
- 83) ***Polyommatus (s.str. (Neolysandra)) ponticus*** (Courvoisier,1911) (Lycaenidae)
- 84) ***Polyommatus (s.str. (Plebicula)) amandus*** (Schneider,1792) (Lycaenidae)
- 85) ***Polyommatus (s.str. (Sublysandra)) aedon*** (Christoph,1877) (Lycaenidae)
- 86) ***Polyommatus (s.str. (Thersitesia)) thersites*** (Canterer,[1835]) (Lycaenidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 5).
- 87) ***Polyommatus (s.str.) buzulmavi*** Carbonell,1991 (Lycaenidae)
- 88) ***Polyommatus (s.str.) icarus*** (Rottemburg,1775) (Lycaenidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 6).
- 89) ***Pseudophilotes vicrama*** (Moore,1865) (Lycaenidae)
- 90) ***Rubrapterus bavius*** (Eversmann,1832) (Lycaenidae)
- 91) ***Satyrrium (Armenia) ledereri*** (Boisduval,1848) (Lycaenidae)



- 92) *Satyrrium (Nordmannia) abdominalis* (Gerhard,[1850]) (Lycaenidae)
- 93) *Satyrrium (Strymonidia) spini* (Fabricius,1787) (Lycaenidae)
- 94) *Tomares callimachus* (Eversmann,1848) (Lycaenidae). A vernal species.
- 95) *Tomares romanovi* (Christoph,1882) (Lycaenidae)
- 96) *Turanana endymion* (Freyer,[1850]) (Lycaenidae)

## Papilionidae

- 97) *Archon apollinaris* (Staudinger,[1892]) (Papilionidae). A vernal species at the lower, preferably cultivated places, where *Aristolochia* grows. *Zerynthia deyrollei* Obth. appears at the same habitat, but 2-3 weeks later. The latter species has not been observed at Artos Mountain, so far.
- 98) *Iphiclides podalirius* (Linnaeus,1758) (Papilionidae)
- 99) *Papilio (s.str.) machaon* Linnaeus,1758 (Papilionidae)
- 100) *Parnassius (Driopa) mnemosyne* (Linnaeus,1758) (Papilionidae). An alpine species at the places, where larval food-plant *Corydalis* grows.

## Pieridae

- 101) *Anthocharis cardamines* (Linnaeus,1758) (Pieridae)
- 102) *Anthocharis damone* Boisduval,1836 (Pieridae)
- 103) *Anthocharis grueneri* Herrich-Schäffer,[1851] (Pieridae). Vernal species.
- 104) *Aporia (s.str.) crataegi* (Linnaeus,1758) (Pieridae)
- 105) *Colias (Eriocolias) crocea* (Fourcroy,1785) (Pieridae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: figs. 14, 15).
- 106) *Colias (Eriocolias) thisoa* Ménétériés,1832 (Pieridae). An alpine species. Previously recorded and illustrated female and her laid egg by the authors (Kemal & Koçak, 2013b: figs. 8-10, 21).
- 107) *Gonepteryx (s.str.) farinosa* (Zeller,1847) (Pieridae)
- 108) *Gonepteryx (s.str.) rhamni* (Linnaeus,1758) (Pieridae)
- 109) *Leptidea duponcheli* (Staudinger,1871) (Pieridae)
- 110) *Pieris (Artogeia) ergane* (Geyer,[1828]) (Pieridae). Previously recorded by the authors (Koçak & Kemal, 2008: fig.16; Kemal & Koçak, 2013b: fig. 7). See also short video film by the Cesa on the behaviour of the butterflies. <sup>8</sup>
- 111) *Pieris (Artogeia) krueperi* Staudinger,1860 (Pieridae)
- 112) *Pieris (Artogeia) persis* Verity,1922 (Pieridae)
- 113) *Pieris (Artogeia) pseudorapae* Verity,1908 (Pieridae)
- 114) *Pontia callidice* (Hübner,[1800]) (Pieridae)
- 115) *Pontia edusa* (Fabricius,1777) (Pieridae)
- 116) *Zegris eupheme* (Esper,[1804]) (Pieridae)

## Satyridae

- 117) *Arethusana arethusia* ([Denis & Schiffermüller],1775) (Satyridae)
- 118) *Chazara (s.str.) bischoffi* (Herrich-Schäffer,[1846]) (Satyridae)
- 119) *Chazara (s.str.) briseis* (Linnaeus,1764) (Satyridae)
- 120) *Coenonympha (s.str.) leander* (Fabricius,1787) (Satyridae). Previously recorded by the authors (Kemal & Koçak, 2013b: figs. 15-16).
- 121) *Coenonympha (s.str.) pamphilus* (Linnaeus,1758) (Satyridae)
- 122) *Coenonympha (s.str.) saadi* (Kollar,[1849]) (Satyridae)
- 123) *Esperarge (s.str.) clymene* (Fabricius,1787) (Satyridae)
- 124) *Hyponephele (s.str.) lupina* (Costa,[1836]) (Satyridae)
- 125) *Hyponephele (s.str.) lycaon* (Rottemburg,1775) (Satyridae)
- 126) *Hyponephele (s.str.) lycaonoides* Weiss,1978 (Satyridae)

<sup>8</sup> Kemal,M., 2008, *Pieris ergane* [in] Butterflies at Artos Mountain, Van Province, East Turkey. *Cent. ent. Stud., Icon. Ins. (Ser.A)*. mpeg2 Video film. Internet archive: <http://www.archive.org/details/PierisErganeInButterfliesAtArtosMountVanProvinceEastTurkey>

- 127) *Lasiommata maera* (Linnaeus,1758) (Satyridae)  
 128) *Maniola (Telmessiola) telmessia* (Zeller,1847) (Satyridae)  
 129) *Maniola (s.str.) jurtina* (Linnaeus,1758) (Satyridae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 10).  
 130) *Melanargia (Parce) russiae* (Esper,[1784]). An alpine species. Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 21).  
 131) *Melanargia (Turcargia) hylata* (Ménétriés,1832) (Satyridae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 11).  
 132) *Melanargia (Turcargia) syriaca* (Oberthür,1894) (Satyridae)  
 133) *Pseudochazara (s.str.) beroe* (Freyer,[1843]) (Satyridae). An alpine species. Previously recorded by the authors (Koçak & Kemal, 2008: fig. 18; Kemal & Koçak, 2013b: figs. 11-14, 21). Another alpine species *P. geyeri* hasnot been recorded here.  
 134) *Pseudochazara (s.str.) mamurra* (Herrich-Schäffer,[1846]) (Satyridae). A rare mountain species (Fig. 5).



**Fig. 5 -** *Pseudochazara mamurra* (Satyridae), at rest. Artos Mountain, northern slopes 1960m, 31 7 2015, M. Kemal (Cesa)

- 135) *Pseudochazara (s.str.) pelopea* (Klug,1832) (Satyridae). Very common.  
 136) *Satyrus (Asatyrus (s.str.)) iranicus* Schwingenschuss,1939 (Satyridae). Rare.  
 137) *Satyrus (s.str.(s.str.)) favonius* Staudinger,[1892] (Satyridae). Rare.

## Moths

Totally 305 species of 21 families are listed below.

### Arctiidae

The species inhabiting in Artos Mountain were previously listed by the authors (Koçak & Kemal, 2015a).

- 138) *Andala semiramis* (Staudinger,1892) (Arctiidae)  
 139) *Euplagia splendidior* (Tams,1922) (Arctiidae)  
 140) *Ocnogyna (Somatrachia) anatolica* Witt,1980 (Arctiidae). Rare in spring.



- 141) ***Ocnogyna (s.str.) loewii* (Zeller,1846)** (Arctiidae). Common in autumn (September-October).  
142) ***Phragmatobia placida* (Frivaldsky,1835)** (Arctiidae)  
143) ***Rhyparia purpurata* (Linnaeus,1758)** (Arctiidae)

### Brachodidae

- 144) ***Brachodes appendiculatus* (Esper,[1783])** (Brachodidae). Local, at grassy places.

### Cimeliidae

- 145) ***Axia (Epicimelia) theresiae* (Korb,1900)** (Cimeliidae). This species was previously recorded and illustrated by the authors from Artos Mountain (Koçak & Kemal, 2012: fig.20).

### Ctenuchidae

- 146) ***Dysauxes (s.str.) famula* (Freyer,1836)** (Ctenuchidae)

### Drepanidae

- 147) ***Cilix asiatica* A.Bang-Haas,1907** (Drepanidae)

### Ethmiidae

- 148) ***Ethmia candidella* (Alpheraky,1908)** (Ethmiidae). Common in autumn.  
149) ***Ethmia chrysopyga* (Zeller,1844)** (Ethmiidae)

### Gelechiidae

- 150) ***Streyella anguinella* (Herrich-Schäffer,1861)** (Gelechiidae). A resting adult was observed by the first author (Fig. 6)



**Fig. 6 - *Streyella anguinella* (Gelechiidae), at rest.** Artos Mountain, northern slopes 1960m, 31 7 2015, M. Kemal (Cesa)

**Geometridae**

- 151) *Aplasta ononaria* (Fuessly,1783) (Geometridae)
- 152) *Aplocera annexata* (Freyer,[1830]) (Geometridae)
- 153) *Aplocera numidaria* (Herrich-Schäffer,[1852]) (Geometridae). An alpine species, above 3000m. Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 21).
- 154) *Camptogramma bilineatum* (Linnaeus,1758) (Geometridae)
- 155) *Catarhoe permixtaria* (Guenée,[1858]) (Geometridae)
- 156) *Catarhoe putridaria* (Herrich-Schäffer,[1852]) (Geometridae)
- 157) *Chesistege korbi* (Bohatsch,1910) (Geometridae). Nocturnal in late autumn.
- 158) *Chloroclysta miata* (Linnaeus,1758) (Geometridae)
- 159) *Cidaria fulvata* (Forster,1771) (Geometridae)
- 160) *Dasycorsa modesta* (Staudinger,1879) (Geometridae)
- 161) *Docirava mundata* (Staudinger,1892) (Geometridae)
- 162) *Eupithecia breviculata* (Donzel,1837) (Geometridae). Male genitalia is illustrated below. It is not distinguishable from the nominate subspecies. However, the population of this species in Van Province may be referred to the subspecies *georgica* Vojn., if valid (**Fig. 7**).



**Fig. 7** – *Eupithecia breviculata*, male genitalia and 8. abdominal tergite and sternite (GP2336), Artos Mountain, northern slopes. M. Kemal (Cesa)

- 163) *Eupithecia gueneata* Millière,1862 (Geometridae)
- 164) *Eupithecia oblongata* (Thunberg,1784) (Geometridae)
- 165) *Eupithecia vulgata* (Haworth,[1809]) (Geometridae)
- 166) *Heliomata glarearia* (Brahm,1791) (Geometridae). A female genitalia is illustrated below (**Fig.8**)
- 167) *Idaea ochrata* (Scopoli,1763) (Geometridae)
- 168) *Isturgia murinaria* ([Denis & Schiffermüller],1775) (Geometridae)
- 169) *Neognopharmia stevenaria* (Boisduval,1840) (Geometridae)
- 170) *Orthonama obstipata* (Fabricius,1794) (Geometridae)
- 171) *Orthostixis calcularia* Lederer,1853 (Geometridae)
- 172) *Peribatodes rhomboidarius* [Denis & Schiffermüller],1775) (Geometridae)
- 173) *Phaselia serrularia* (Eversmann,1847) (Geometridae)



**Fig. 8** - *Heliomata glarearia*, female genitalia (GP2315). Artos Mt. northern slopes, M. Kemal (Cesa)

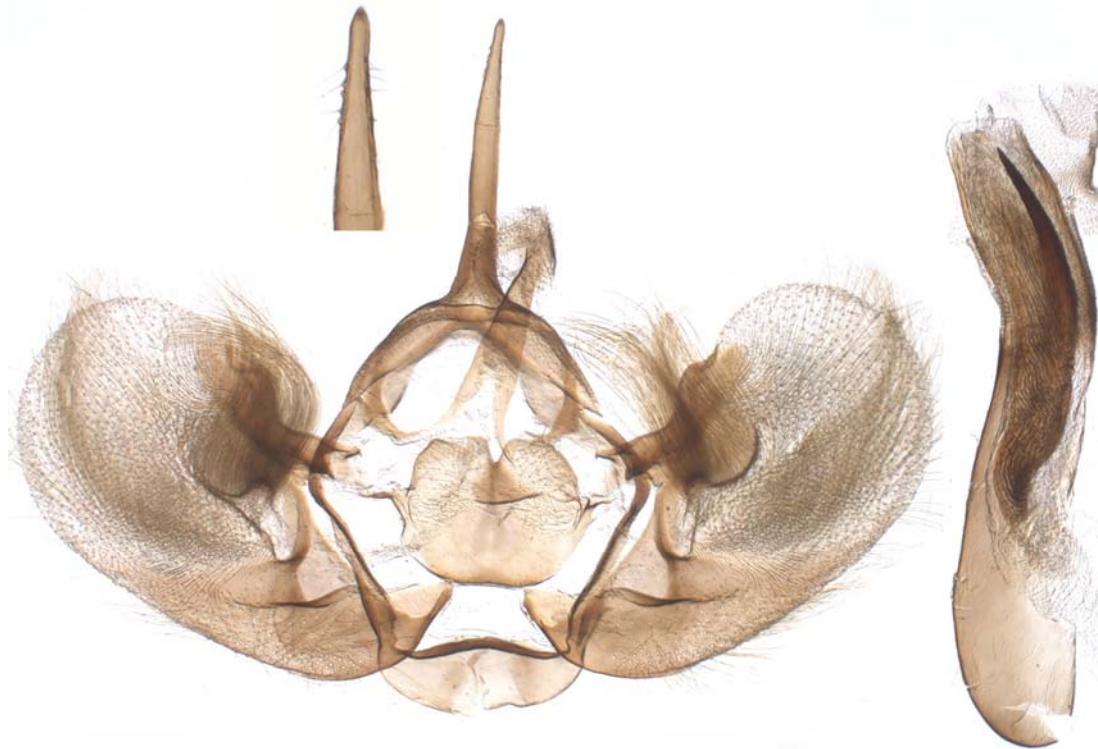
- 174) *Rhometra sacraria* (Linnaeus, 1767) (Geometridae)
- 175) *Rhodostrophia (Asiatrophia) auctata* (Staudinger, 1879) (Geometridae)
- 176) *Rhodostrophia (Pellonia) vibicaria* (Linnaeus, 1761) (Geometridae)
- 177) *Rhodostrophia (Pydna) badiaria* (Freyer, [1841]) (Geometridae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 21).
- 178) *Rhodostrophia (s.str.) discopunctata* Amsel, 1935 (Geometridae)
- 179) *Rhodostrophia (s.str.) sieversi* (Christoph, 1882) (Geometridae). Male genitalia is illustrated below (Fig. 9).



**Fig. 9** - *Rhodostrophia sieversi*, male genitalia (GP2034). Van Prov., Gevaş, Artos Mt., M. Kemal (Cesa)



- 180) ***Rhodostrophia cuprinaria* (Christoph,1876)** (Geometridae)  
 181) ***Scopula beckeraria* (Lederer,1853)** (Geometridae)  
 182) ***Scopula decorata* ([Denis & Schiffermüller],1775)** (Geometridae)  
 183) ***Scopula incanata* (Linnaeus,1758)** (Geometridae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 21).  
 184) ***Scopula marginepunctata* (Goeze,1781)** (Geometridae)  
 185) ***Scopula orientalis* (Alpheraky,1876)** (Geometridae)  
 186) ***Scopula tessellaria* (Boisduval,1840)** (Geometridae)  
 187) ***Scotopteryx chenopodiata* (Linnaeus,1758)** (Geometridae)  
 188) ***Scotopteryx vicinaria* (Duponchel,1830)** (Geometridae)  
 189) ***Selidosema plumarium* ([Denis & Schiffermüller],1775)** (Geometridae)  
 190) ***Stamnodes depeculata* (Lederer,1870)** (Geometridae). This alpine species was previously recorded from Artos Mt. by the authors (Kemal & Koçak, 2013b: figs. 5,6). Male genitalia is illustrated below (**Fig. 10**)

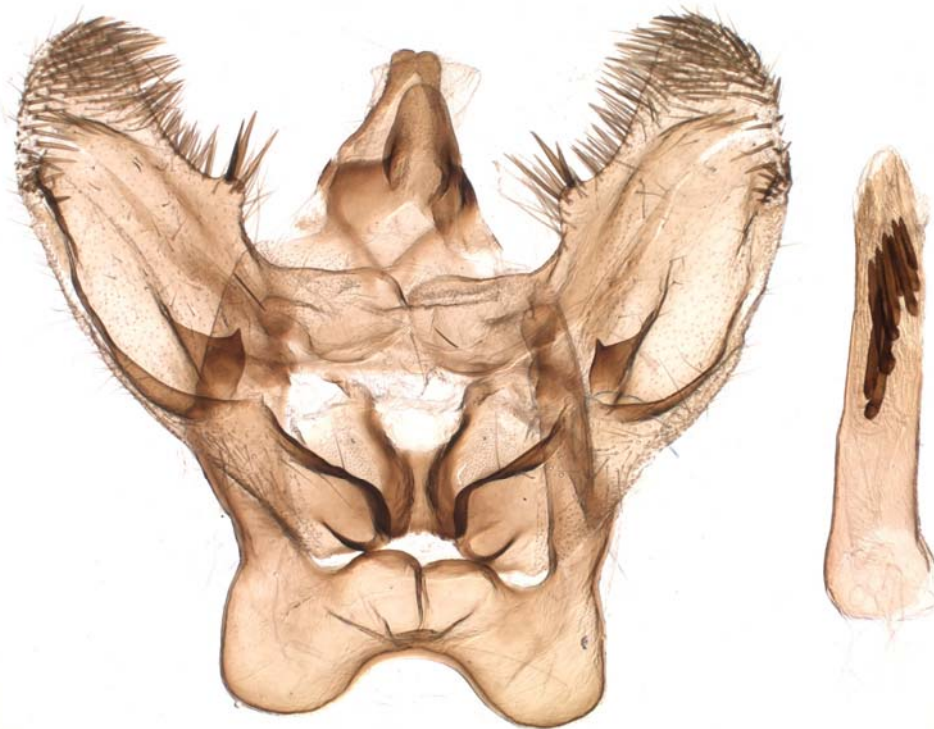


**Fig. 10** - *Stamnodes depeculata*, male genitalia (GP2032), Van Prov., Gevaş, Artos Mt. 3100m, M. Kemal (Cesa) [uncus apex enlarged]

- 191) ***Synopsidia phasidaria* (Rogenhofer,1873)** (Geometridae). Male genitalia is illustrated below (**Fig. 11**)  
 192) ***Thalera fimbrialis* (Scopoli,1763)** (Geometridae)  
 193) ***Thetidia persica* Hausmann,1996** (Geometridae)

### Lasiocampidae

- 194) ***Lasiocampa eversmanni* (Kindermann,1843)** (Lasiocampidae)  
 195) ***Malacosoma castrensis* (Linnaeus,1758)** (Lasiocampidae)



**Fig. 11** - *Synopsidia phasidaria*, male genitalia (GP2029), Van Prov., Gevaş, Artos Mt. 3100m, M Kemal (Cesa)

### Lymantriidae

- 196) *Euproctis chrysorrhoea* (Linnaeus,1758) (Lymantriidae)

### Noctuidae

- 197) *Acontia (s.str.) lucida* (Hufnagel,1766) (Noctuidae)  
 198) *Acontia (Uracontia) titania* (Esper,[1798]) (Noctuidae)  
 199) *Acronicta (Subacronicta) megacephala* (Fabricius,1787) (Noctuidae)  
 200) *Acronicta (Viminia) rumicis* (Linnaeus,1758) (Noctuidae)  
 201) *Aedophron phlebophora* Lederer,1858 (Noctuidae). This species was previously recorded and illustrated by the authors from Artos Mountain (Koçak & Kemal, 2012: fig.25).  
 202) *Agrochola (Alpichola) egorovi* (O.Bang-Haas,1934) (Noctuidae)  
 203) *Agrochola (Alpichola) lactiflora* (Draudt,1934) (Noctuidae)  
 204) *Agrochola (Anchoscelis) gratiosa* (Staudinger,1882) (Noctuidae)  
 205) *Agrotis (Crassagrotis) bigramma* (Esper,[1790]) (Noctuidae)  
 206) *Agrotis (s.str.) exclamationis* (Linnaeus,1758) (Noctuidae)  
 207) *Agrotis (s.str.) ipsilon* (Hufnagel,1766) (Noctuidae)  
 208) *Agrotis (s.str.) segetum* ([Denis & Schiffermüller],1775) (Noctuidae)  
 209) *Amphipyra (s.str.) tragopoginis* (Clerck,1759) (Noctuidae)  
 210) *Antitype jonis* (Lederer,1865) (Noctuidae)  
 211) *Apamea (s.str.) ferrago* (Eversmann,1837) (Noctuidae)  
 212) *Apamea (s.str.) platinea* (Treitschke,1825) (Noctuidae)  
 213) *Apamea (s.str.) syriaca* (Osthelder,1933) (Noctuidae)  
 214) *Autophila (s.str.) asiatica* (Staudinger,1888) (Noctuidae)  
 215) *Autophila (s.str.) dilucida* (Hübner,[1808]) (Noctuidae)  
 216) *Bryomima carducha* Staudinger,1900 (Noctuidae)  
 217) *Bryomima defreina* Hacker,[1987] (Noctuidae)  
 218) *Calamia staudingeri* Warnecke,1941 (Noctuidae)

- 219) *Callistege mi* (Clerck,1759) (Noctuidae)
- 220) *Caradrina (Boursinidrina) parvaspersa* (Boursin,1936) (Noctuidae)
- 221) *Caradrina (Boursinidrina) rjabovi* (Boursin,1936) (Noctuidae)
- 222) *Caradrina (Eremodrina) doleropsis* (Boursin,1939) (Noctuidae)
- 223) *Caradrina (Eremodrina) gilva* (Donzel,1837) (Noctuidae)
- 224) *Caradrina (Eremodrina) inumbrata* (Staudinger,1900) (Noctuidae)
- 225) *Caradrina (Eremodrina) vicina* (Staudinger,1870) (Noctuidae)
- 226) *Caradrina (Paradrina) boursini* (F.Wagner,1936) (Noctuidae)
- 227) *Caradrina (Paradrina) poecila* (Boursin,1939) (Noctuidae)
- 228) *Caradrina (Paradrina) wulschlegeli* (Püngeler,1903) (Noctuidae)
- 229) *Catocala (s.str.) elocata* (Esper,[1787]) (Noctuidae)
- 230) *Catocala (s.str.) puerpera* (Giorna,1791) (Noctuidae)
- 231) *Chersotis (s.str.) anatolica* (Draudt,1936) (Noctuidae)
- 232) *Chersotis (s.str.) capnistis* (Lederer,[1870]) (Noctuidae)
- 233) *Chersotis (s.str.) fimbriola* (Esper,[1798]) (Noctuidae)
- 234) *Chersotis (s.str.) rectangula* (Fabricius,1787) (Noctuidae)
- 235) *Chersotis (s.str.) semna* (Püngeler,1906) (Noctuidae). Uncommon in late autumn.
- 236) *Cleonymia (Serryvania) opposita* (Lederer,1870) (Noctuidae)
- 237) *Conistra (s.str.) chajjami* Hacker & Weigert,1986 (Noctuidae). Uncommon.
- 238) *Cryphia (Bryoleuca) petrea* (Guenée,1852) (Noctuidae)
- 239) *Cryphia (Bryoleuca) raptricula* ([Denis & Schiffermüller],1775) (Noctuidae)
- 240) *Cryphia (Bryophila) maeonis* (Lederer,1865) (Noctuidae)
- 241) *Cryphia (Bryophila) occidentalis* (Osthelder,1933) (Noctuidae)
- 242) *Cryphia (Euthales) algae* (Fabricius,1775) (Noctuidae)
- 243) *Cucullia (s.str.) argentina* (Fabricius,1787) (Noctuidae)
- 244) *Desertoplusia colornata* Varga & L.Ronkay,1991 (Noctuidae)
- 245) *Dichagyris (Albocosta) flammatra* ([Denis & Schiffermüller],1775) (Noctuidae)
- 246) *Dichagyris (Grisyigoga) candelisequa* ([Denis & Schiffermüller],1775) (Noctuidae)
- 247) *Dichagyris (s.str.) erubescens* (Staudinger,1892) (Noctuidae)
- 248) *Dichagyris (s.str.) forficula* (Eversmann,1851) (Noctuidae)
- 249) *Dichagyris (s.str.) fredei* (Brandt,1938) (Noctuidae)
- 250) *Dichagyris (s.str.) melanura* (Kollar,1846) (Noctuidae)
- 251) *Dichagyris (s.str.) pfeifferi* (Corti & Draudt,1933) (Noctuidae)
- 252) *Dichagyris (s.str.) squalidior* (Staudinger,1901) (Noctuidae)
- 253) *Dichagyris (Yigoga) celsicola* (Bellier,1858) (Noctuidae)
- 254) *Dichagyris (Yigoga) nigrescens* (Hofner,1888) (Noctuidae)
- 255) *Dichagyris (Yigoga) truculenta* (Lederer,1853) (Noctuidae)
- 256) *Drasteria cailino* (Lefèbvre,1827) (Noctuidae)
- 257) *Drasteria caucasica* (Kolenati,1846) (Noctuidae)
- 258) *Drasteria saisanii* (Staudinger,1882) (Noctuidae)
- 259) *Earias clorana* (Linnaeus,1761) (Noctuidae)
- 260) *Egira anatolica* (M.Hering,1933) (Noctuidae)
- 261) *Episema korsakovi* (Christoph,1885) (Noctuidae). Uncommon in late autumn.
- 262) *Eremobia asiatica* Draudt,1936 (Noctuidae)
- 263) *Eublemma (albida-gr.) hansa* (Herrich-Schäffer,[1851]) (Noctuidae)
- 264) *Eublemma (albida-gr.) stramineum* (Staudinger,1892) (Noctuidae)
- 265) *Eublemma (bulla-gr.) suppurum* (Staudinger,1892) (Noctuidae)
- 266) *Eublemma (Glossodice) polygrammum* (Duponchel,[1842]) (Noctuidae). This species was previously recorded and illustrated by the authors from Artos Mountain (Koçak & Kemal, 2012: fig.26).
- 267) *Eublemma (parva-gr.) parvum* (Hübner,[1808]) (Noctuidae)
- 268) *Eublemma (rosina-gr.) parallelum* (Freyer,1842) (Noctuidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 21).
- 269) *Euchalcia emichi* (Rogenhofer,1873) (Noctuidae)
- 270) *Euchalcia kitchingi* Hacker & Ronkay,1992 (Noctuidae)
- 271) *Euchalcia siderifera* (Eversmann,1846) (Noctuidae)



- 272) *Eugnorisma (Metagnorisma) pontica* (Staudinger,1892) (Noctuidae)
- 273) *Eugnorisma (s.str.) chaldaica* (Boisduval,1840) (Noctuidae)
- 274) *Eugnorisma (s.str.) eminens* (Lederer,1855) (Noctuidae)
- 275) *Eugnorisma (s.str.) insignata* (Lederer,1853) (Noctuidae)
- 276) *Eulocastra diaphora* (Staudinger,1879) (Noctuidae)
- 277) *Euxoa (Orosagrotis) foeda* (Lederer,1855) (Noctuidae)
- 278) *Euxoa (s.str.) aquilina* ([Denis & Schiffermüller],1775) (Noctuidae)
- 279) *Euxoa (s.str.) conspicua* (Hübner,[1824]) (Noctuidae)
- 280) *Euxoa (s.str.) distinguenda* (Lederer,1857) (Noctuidae)
- 281) *Euxoa (s.str.) heringi* Christoph,1877 (Noctuidae)
- 282) *Euxoa (s.str.) nigricans* (Linnaeus,1761) (Noctuidae)
- 283) *Euxoa (s.str.) scurrilis* Draudt,1937 (Noctuidae)
- 284) *Euxoa (s.str.) segnilis* (Duponchel,1836) (Noctuidae)
- 285) *Euxoa (s.str.) sulcifera* (Christoph,1893) (Noctuidae)
- 286) *Euxoa (s.str.) temera* (Hübner,[1808]) (Noctuidae)
- 287) *Gortyna (s.str.) flavago* ([Denis & Schiffermüller],1775) (Noctuidae)
- 288) *Gortyna (s.str.) osmana* Hacker & Kuhna,1986 (Noctuidae)
- 289) *Hadena (Anepia) syriaca* (Osthelder,1933) (Noctuidae)
- 290) *Hadena (Anepia) wolffi* Hacker,1992 (Noctuidae)
- 291) *Hadena (Enterpia) roseocandida* (Hacker,1996) (Noctuidae)
- 292) *Hadena (Maschukia) pumila* (Staudinger,1879) (Noctuidae)
- 293) *Hadena (Pinkericola) cappadocia* Hacker,1987 (Noctuidae)
- 294) *Hadena (s.str.) cavalla* Pinker,1980 (Noctuidae)
- 295) *Hadena (s.str.) compta* ([Denis & Schiffermüller],1775) (Noctuidae)
- 296) *Hadena (s.str.) gueneei* (Staudinger,1901) (Noctuidae)
- 297) *Hadena (s.str.) humilis* (Christoph,1893) (Noctuidae)
- 298) *Hadena (s.str.) hyrcanoides* Hacker,1996 (Noctuidae)
- 299) *Hadena (s.str.) impressa* (Esper,[1790]) (Noctuidae)
- 300) *Hadena (s.str.) magnolii* (Boisduval,1828) (Noctuidae)
- 301) *Hadena (s.str.) melanochroa* (Staudinger,1892) (Noctuidae)
- 302) *Hadena (s.str.) pfeifferi* (Draudt,1934) (Noctuidae)
- 303) *Hadena (s.str.) purpurea* Hacker,1996 (Noctuidae)
- 304) *Hadena (s.str.) staudingeri* (F.Wagner,1931) (Noctuidae)
- 305) *Hadena (s.str.) subhyrcana* Hacker,1996 (Noctuidae)
- 306) *Hadena (s.str.) vanensis* Hacker,1996 (Noctuidae)
- 307) *Haemerosia renalis* (Hübner,[1813]) (Noctuidae)
- 308) *Hecatera bicolorata* (Hufnagel,1766) (Noctuidae)
- 309) *Hecatera spinaciae* (Vieweg,1790) (Noctuidae)
- 310) *Heliophobus reticulata* (Goeze,1781) (Noctuidae)
- 311) *Heliopsis peltigera* ([Denis & Schiffermüller],1775) (Noctuidae)
- 312) *Heterophysa dumetorum* (Geyer,1834) (Noctuidae)
- 313) *Hoplodrina ambigua* ([Denis & Schiffermüller],1775) (Noctuidae)
- 314) *Hoplodrina blanda* ([Denis & Schiffermüller],1775) (Noctuidae)
- 315) *Hoplodrina octogenaria* (Goeze,1781) (Noctuidae)
- 316) *Hoplodrina pfeifferi* (Boursin,1932) (Noctuidae)
- 317) *Hoplodrina superstes* (Ochsenheimer,1816) (Noctuidae)
- 318) *Hypena munitalis* Mann,1861 (Noctuidae)
- 319) *Lacanobia (Dianobia) thalassina* (Hufnagel,1766) (Noctuidae)
- 320) *Lacanobia (Diataraxia) oleracea* (Linnaeus,1758) (Noctuidae)
- 321) *Lacanobia (s.str.) w-latinum* (Hufnagel,1766) (Noctuidae)
- 322) *Leucania loreyi* (Duponchel,1827) (Noctuidae)
- 323) *Lygephila (s.str.) cracca* (Fabricius,1787) (Noctuidae)
- 324) *Lygephila (s.str.) pastinum* (Treitschke,1826) (Noctuidae)
- 325) *Margelana flavidior* Wagner,1831 (Noctuidae). Uncommon in late autumn.
- 326) *Megalodes eximia* (Freyer,1845) (Noctuidae)
- 327) *Mesoligia furuncula* ([Denis & Schiffermüller],1775) (Noctuidae)
- 328) *Metachrostis dardouini* (Boisduval,1840) (Noctuidae)

- 329) *Metopoplus boursini* Brandt, 1938 (Noctuidae)  
 330) *Mythimna (Aletia) l-album* (Linnaeus, 1767) (Noctuidae)  
 331) *Mythimna (Aletia) vitellina* (Hübner, [1808]) (Noctuidae)  
 332) *Mythimna (Hyphilare) albipuncta* (Fabricius, 1787) (Noctuidae)  
 333) *Mythimna (Hyphilare) ferrago* (Fabricius, 1787) (Noctuidae)  
 334) *Mythimna (Pseudaletia) unipuncta* (Haworth, [1809]) (Noctuidae)  
 335) *Noctua (Latanoctua) orbona* (Hufnagel, 1766) (Noctuidae)  
 336) *Noctua (Paranoctua) comes* (Hübner, [1813]) (Noctuidae)  
 337) *Noctua (Paranoctua) interposita* (Hübner, 1790) (Noctuidae)  
 338) *Noctua (s.str.) pronuba* (Linnaeus, 1758) (Noctuidae)  
 339) *Ochropleura plecta* (Linnaeus, 1761) (Noctuidae)  
 340) *Oligia latruncula* ([Denis & Schiffermüller], 1775) (Noctuidae)  
 341) *Oligia turcia* Rezbanyai-Reser, 1997 (Noctuidae)  
 342) *Omphalophana anatolica* (Lederer, 1857) (Noctuidae)  
 343) *Oncocnemis fuscipicta* Wiltshire, 1976 (Noctuidae)  
 344) *Opigena polygona* (Fabricius, 1787) (Noctuidae)  
 345) *Orthosia (s.str.) incerta* (Hufnagel, 1766) (Noctuidae)  
 346) *Perigrapha (Opacographa) cilissa* Püngeler, 1917 (Noctuidae). Uncommon in spring.  
 347) *Phlogophora meticulosa* (Linnaeus, 1758) (Noctuidae)  
 348) *Phytometra viridaria* (Clerck, 1759) (Noctuidae)  
 349) *Plecoptera inquinata* (Lederer, 1857) (Noctuidae)  
 350) *Plusidia cheiranthi* (Tauscher, 1809) (Noctuidae)  
 351) *Polymixis (Brandticola) dubiosa* (Brandt, 1938) (Noctuidae)  
 352) *Pseudenargia deleta* (Osthelder, 1933) (Noctuidae)  
 353) *Rhyacia (s.str.) lucipeta* ([Denis & Schiffermüller], 1775) (Noctuidae)  
 354) *Sideridis (Aneda) rivularis* (Fabricius, 1775) (Noctuidae)  
 355) *Sideridis (Luteohadena) luteago* ([Denis & Schiffermüller], 1775) (Noctuidae)  
 356) *Simyra dentinosa* Freyer, 1839 (Noctuidae). Caterpillars are frequently seen in the area in summer during feeding on *Euphorbia*.  
 357) *Spodoptera exiguum* (Hübner, [1808]) (Noctuidae)  
 358) *Standfussiana lucerneae* (Linnaeus, 1758) (Noctuidae)  
 359) *Tholera decimalis* (Poda, 1761) (Noctuidae). Common in late autumn.  
 360) *Tholera hilaris* (Staudinger, 1901) (Noctuidae). Common in late autumn.  
 361) *Tyta luctuosa* ([Denis & Schiffermüller], 1775) (Noctuidae)  
 362) *Xestia (Megasema) c-nigrum* (Linnaeus, 1758) (Noctuidae)  
 363) *Zekelita (Rhynchodontodes) antiqualis* (Hübner, [1809]) (Noctuidae)

## Notodontidae

- 364) *Cerura (s.str.) vinula* (Linnaeus, 1758) (Notodontidae). Caterpillar of this species was observed on *Salix*, and reared by the first author. The subspecies *irakana* is referred to this species (Figs. 12-14).  
 365) *Pterostoma palpinum* (Linnaeus, 1761) (Notodontidae)

## Psychidae

- 366) *Typhonia lugubris* (Hübner, 1793) (Psychidae)

## Pterophoridae

- 367) *Cnaemidophorus rhododactylus* (Fabricius, 1787) (Pterophoridae)  
 368) *Procapperia maculata* (Constant, 1865) (Pterophoridae)  
 369) *Stenoptilia mannii* (Zeller, 1852) (Pterophoridae)



**Figs. 12-14** – *Cerura vinula* ssp. *irakana* (Notodontidae), reared on *Salix*. Top: On 29 6 2014, middle, on 2 7 2014, in captivity, during eating his larval skin; bottom, on 8 7 2014, full-grown caterpillar. Gevaş, Artos Mountain, M. Kemal (Cesa)



**Pyralidae**

370) ***Ancylois cinnamomella* (Duponchel,1836)** (Pyralidae)

371) ***Arsissa ramosella* (Herrich-Schäffer,[1855])** (Pyralidae). This nocturnal species was observed by the first author during in copula (**Fig. 15**).



**Fig. 15** – *Arsissa ramosella*, in copula. Artos Mountain northern slopes 1900m, 15 7 2012, M. Kemal (Cesa)

372) ***Asalebria (Exophora) exasperata* (Staudinger,1879)** (Pyralidae)

373) ***Asalebria (Exophora) floreella* (Mann,1862)** (Pyralidae)

374) ***Bradyrrhoa gilveolella* (Treitschke,1833)** (Pyralidae)

375) ***Catoptria falsella* ([Denis & Schiffermüller],1775)** (Pyralidae)

376) ***Crambus pascuellus* (Linnaeus,1758)** (Pyralidae)

377) ***Crambus perllellus* (Scopoli,1763)** (Pyralidae)

378) ***Cynaeda (Noctuelia) nepticalis* (Hofmann,[1898])** (Pyralidae)

379) ***Cynaeda (Noctuelia) superba* (Freyer,[1844])** (Pyralidae)

380) ***Cynaeda (Usgentia) vespertalis* (Herrich-Schäffer,[1855])** (Pyralidae)

381) ***Ecpyrrhorhoe diffusalis* (Guenée,1854)** (Pyralidae)

382) ***Epascestria pustulalis* (Hübner,[1823])** (Pyralidae)

383) ***Ephelis cruentalis* (Geyer,[1832])** (Pyralidae)

384) ***Epiepischnia pseudolydella* Amsel,1954** (Pyralidae)

385) ***Evergestis mundalis* (Guenée,1854)** (Pyralidae)

386) ***Evergestis politalis* ([Denis & Schiffermüller],1775)** (Pyralidae)

387) ***Evergestis umbrosalis* (Fischer v.Röslerstamm,[1842])**. (Pyralidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 21).

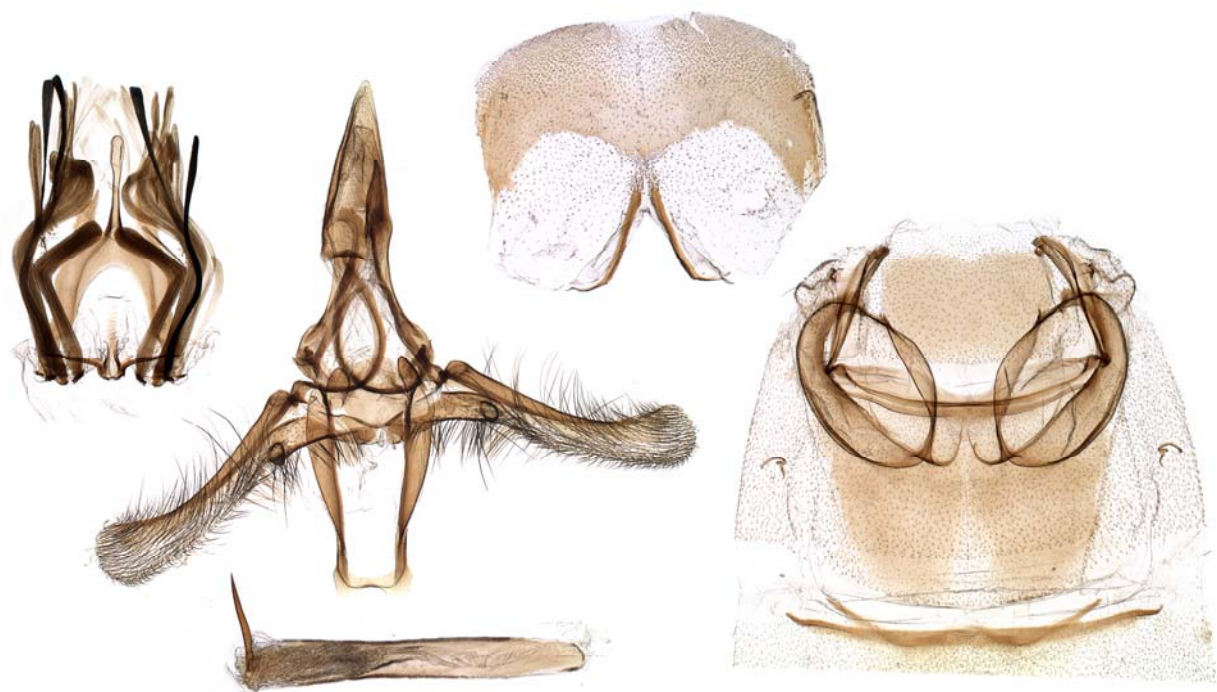
388) ***Loxostege wagneri* Zerny,1929** (Pyralidae). Previously known only from Central Anatolia. New record to Van Province also East Turkey!

389) ***Mecyna subsequalis* (Herrich-Schäffer,1851)** (Pyralidae)

390) ***Myelois (Gnathogutta) pluripunctella* (Ragonot,1887)** (Pyralidae)

391) ***Myrlaea albistrigata* (Staudinger,1881)** (Pyralidae). Common in the mountain tragacanthic steppe in East Turkey.

392) ***Myrlaea nigrosquamalis* (Amsel,1950)** (Pyralidae). Basal black marking of underside fore-wing distinguishes this species easily. Previously known from Iran and East Turkey (Bitlis Province). New record to Van Province! [See also Akin (2015)] (**Fig. 16**)



**Fig. 16** – *Myrllaea nigrosquamalis*, male genitalia, coremata, terminal abdominal segment and tympanal organ (GP2289), Van Prov., Gevaş, Artos Mt., M. Kemal (Cesa)

393) *Nomophila noctuella* ([Denis & Schiffermüller], 1775) (Pyralidae)

394) *Ocrisiodes antiopa* Roesler, 1988 (Pyralidae). New record to Turkey! This species occurs also in other parts of Van Lake basin, together with *Epiepischnia pseudolydella* (Figs. 17, 18).



**Fig. 17** - *Ocrisiodes antiopa*, female genitalia (GP2332). Artos Mt., northern slopes. M. Kemal (Cesa)



**Fig. 18** - *Ocrisiodes antiopa*, male genitalia and coremata (GP2333). Artos Mt., northern slopes. M. Kemal (Cesa)

395) ***Oncocera semirubella* (Scopoli,1763)** (Pyralidae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 16).

396) ***Paracorsia repandalis* ([Denis & Schiffermüller],1775)** (Pyralidae). Male genitalia is illustrated below (Fig. 19)



**Fig. 19** - *Paracorsia repandalis*, male genitalia and coremata (GP2333). Artos Mt., northern slopes. M. Kemal (Cesa)

397) ***Pempelia alpigenella* (Duponchel,1836)** (Pyralidae)

398) ***Pempeliella ornatella* ([Denis & Schiffermüller],1775)** (Pyralidae)

399) ***Phlyctaenomorpha sinuosalis* (Le Cerf,[1910])** (Pyralidae)

400) ***Pyrausta aurata* (Scopoli,1763)** (Pyralidae)

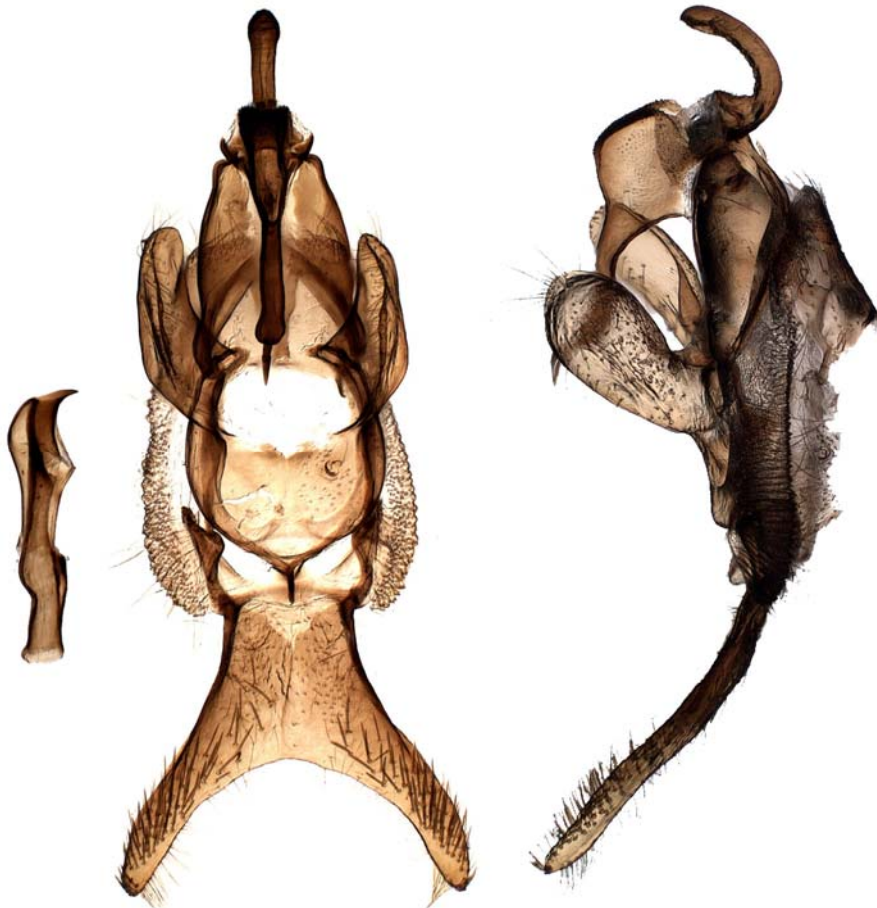
401) ***Pyrausta despicata* (Scopoli,1763)** (Pyralidae)



- 402) ***Pyrausta limbopunctalis* (Herrich-Schäffer,[1849])** (Pyralidae). Previously recorded by the authors (Kemal & Koçak, 2013b: figs. 19-21).
- 403) ***Sciota rhenella* (Zincken,1818)** (Pyralidae)
- 404) ***Sitochroa palealis* ([Denis & Schiffermüller],1775)** (Pyralidae)
- 405) ***Sitochroa verticalis* (Linnaeus,1758)** (Pyralidae)
- 406) ***Stemmatophora brunnealis* (Treitschke,1829)** (Pyralidae)
- 407) ***Synaphe bombycalis* ([Denis & Schiffermüller],1775)** (Pyralidae)
- 408) ***Synaphe consecratalis* (Lederer,1855)** (Pyralidae)
- 409) ***Synoria antiquella* (Herrich-Schäffer,[1855])** (Pyralidae)
- 410) ***Tegostoma perlepidalis* (Guenée,1854)** (Pyralidae)
- 411) ***Udea ferrugalis* (Hübner,1796)** (Pyralidae)
- 412) ***Udea praepetalis* (Lederer,1869)** (Pyralidae)
- 413) ***Uresiphita polygonalis* ([Denis & Schiffermüller],1775)** (Pyralidae)

### Scythridae

- 414) ***Scythris (scopolella-gr.) flabella* (Mann,1861)** (Scythridae). This species was reported and illustrated by the authors from Altınsaç, in the same district, Gevaş (Kemal & Koçak, 2016b) (Fig. 20)



**Fig. 20** - *Scythris flabella*, male genitalia from both sides (GP2163), Van Prov., Gevaş, Artos Mt., M. Kemal (Cesa)

### Sesiidae

- 415) ***Chamaesphecia bibioniformis* (Esper,[1800])** (Sesiidae)
- 416) ***Chamaesphecia elampiformis* (Herrich-Schäffer,1851)** (Sesiidae)
- 417) ***Chamaesphecia masariformis* (Ochsenheimer,1808)** (Sesiidae)

**Sphingidae**

- 418) *Deilephila suellus* Staudinger, 1878 (Sphingidae)
- 419) *Hemaris (Eitschbergera) tityus* (Linnaeus, 1758) (Sphingidae)
- 420) *Hemaris (s.str.) syra* (Daniel, 1939) (Sphingidae)
- 421) *Hyles hippophaes* (Esper, [1789]) (Sphingidae)
- 422) *Hyles nicaea* (Prunner, 1798) (Sphingidae)
- 423) *Macroglossum stellatarum* (Linnaeus, 1758) (Sphingidae)
- 424) *Smerinthus kindermanni* Lederer, 1852 (Sphingidae)
- 425) *Sphingonaepiopsis gorgoniades* (Hübner, [1819]) (Sphingidae)

**Tortricidae**

- 426) *Aethes smeathmanniana* (Fabricius, 1781) (Tortricidae)
- 427) *Aethes tesserana* ([Denis & Schiffermüller], 1775) (Tortricidae)
- 428) *Aphelia (Zelothereses) ferugana* (Hübner, 1793) (Tortricidae)
- 429) *Cnephasia (s.str.) orientana* (Alpheraky, 1877) (Tortricidae)
- 430) *Cochylis posterana* Zeller, 1847 (Tortricidae)
- 431) *Epinotia thapsiana* (Zeller, 1847) (Tortricidae). Female genitalia and basal segments of the abdomen are illustrated below (Figs. 21, 22)



**Figs. 21, 22** - *Epinotia thapsiana*, female genitalia and basal segments of abdomen (GP2331). Artos Mt., northern slopes. M. Kemal (Cesa)

- 432) ***Pelochrista medullana* (Staudinger,1880)** (Tortricidae). This species was recently identified and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2016a: figs. 14, 16).
- 433) ***Pelochrista* sp.** (Tortricidae). This species will be evaluated separately.
- 434) ***Tortrix viridana* (Linnaeus,1758)** (Tortricidae)

### Yponomeutidae

- 435) ***Plutella (s.str.) xylostella* (Linnaeus,1758)** (Yponomeutidae)
- 436) ***Ypsolopha excisella* (Lederer,1855)** (Yponomeutidae)

### Zygaenidae

- 437) ***Zygaena (Agrumenia) carniolica* (Scopoli,1763)** (Zygaenidae)
- 438) ***Zygaena (Agrumenia) loti* ([Denis & Schiffermüller],1775)** (Zygaenidae)
- 439) ***Zygaena (Agrumenia) peschmerga* Eckweiler & Görgner,1981** (Zygaenidae). An alpine species, recently discovered in this province by the first author (Kemal & Koçak, 2013a: 3 figs.).
- 440) ***Zygaena (Mesembrynus) cambysea* Lederer,1870** (Zygaenidae)
- 441) ***Zygaena (Mesembrynus) cuvieri* Boisduval,1828** (Zygaenidae)
- 442) ***Zygaena (s.str.) filipendulae* (Linnaeus,1758)** (Zygaenidae)

## Other Pterygota orders

Totally 213 species of 64 families of 10 orders are listed below.

### Odonata

#### Aeshnidae

- 443) ***Aeshna mixta* Latreille,1805** (Aeshnidae)
- 444) ***Aeshna serrata* (Hagen,1856)** (Aeshnidae)

#### Coenagrionidae

- 445) ***Coenagrion lunulatum* (Charpentier,1840)** (Coenagrionidae)

#### Cordulegasteridae

- 446) ***Cordulegaster insignis* Schneider,1845** (Cordulegasteridae)

#### Libellulidae

- 447) ***Libellula depressa* Linnaeus,1758** (Libellulidae)
- 448) ***Libellula quadrimaculata* Linnaeus,1758** (Libellulidae)

### Mantodea

#### Empusidae

- 449) ***Empusa fasciata* Brullé,1836** (Empusidae)



**Irididae**

- 450) *Iris oratoria* (Linnaeus,1758) (Irididae). This species was previously reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2008: fig. 17).

**Mantidae**

- 451) *Bolivaria brachyptera* (Pallas,1773) (Mantidae). This species was previously reported from Artos Mountain and illustrated by the authors (Koçak & Kemal, 2012: fig.6).

**Dermaptera****Forficulidae**

- 452) *Anechura bipunctata* (Fabricius,1781) (Forficulidae). Previously recorded by the authors (Kemal & Koçak, 2013b: figs. 22, 23).

**Orthoptera****Acrididae**

- 453) *Calliptamus italicus* (Linnaeus,1758) (Acrididae)  
 454) *Chorthippus (Glyptobothrus) vagans* (Eversmann,1848) (Acrididae)  
 455) *Dociostaurus (Kazakia) jagoi* Soltani,1978 (Acrididae)  
 456) *Dociostaurus (Notostaurus) anatolicus* Krauss,1896 (Acrididae)  
 457) *Oedaleus decorus* (Germar,1825) (Acrididae)  
 458) *Oedipoda caerulescens* (Linnaeus,1758) (Acrididae)  
 459) *Oedipoda miniata* (Pallas,1771) (Acrididae)  
 460) *Oedipoda schochii* Saussure,1884 (Acrididae)  
 461) *Pseudoceles* sp. n. (Acrididae). A separate paper is under preparation by M. Ünal.  
 462) *Pyrgodera armata* (Fischer von Waldheim,1820) (Acrididae)  
 463) *Stenobothrus nigromaculatus* (Herrich-Schäffer,1840) (Acrididae)

**Gryllidae**

- 464) *Oecanthus pellucens* (Scopoli,1763) (Gryllidae)

**Pamphagidae**

- 465) *Eremopeza saussurei* (Uvarov,1918) (Pamphagidae)  
 466) **Unidentified species.** A pamphagid female previously recorded by the authors (Kemal & Koçak, 2013b: fig. 24).

**Tettigoniidae**

- 467) *Acrometopa syriaca* Brunner von Wattenwyl,1878 (Tettigoniidae)  
 468) *Isophya bicarinata* Karabağ,1957 (Tettigoniidae)  
 469) *Pezodrymadusa indivisa* Karabağ,1961 (Tettigoniidae). This species was previously reported from Artos Mountain and illustrated by the authors (Koçak & Kemal, 2012: fig.11).  
 470) *Platypleis (s.str.) intermedia* (Audinet-Serville,[1839]) (Tettigoniidae)  
 471) *Saga ephippigera* Fischer von Waldheim,1846 (Tettigoniidae)  
 472) *Tylopsis lilifolia* (Fabricius,1793) (Tettigoniidae)  
 473) *Uvarovistia (s.str.) satunini* (Uvarov,1916) (Tettigoniidae)

**Hemiptera**

An attempt on the Hemiptera fauna of Artos Mountains were made by the authors (Kemal & Koçak, 2014a).

**Alydidae**

- 474) *Camptopus lateralis* (Germar,1817) (Alydidae)  
475) *Camptopus tragacanthae* (Kolenati,1845) (Alydidae)

**Coreidae**

- 476) *Coreus marginatus* (Linnaeus,1758) (Coreidae)  
477) *Coriomeris vitticollis* Reuter,1900 (Çerçi, pers. comm.) (Coreidae)  
478) *Coriomeris scabricornis* (Panzer,1809) (Coreidae)  
479) *Enoplops disciger* (Kolenati,1845) (Coreidae)  
480) *Phyllomorpha laciniata* (Villers,1789) (Coreidae)  
481) *Spathocera lobata* (Herrich-Schäffer,1840) (Coreidae)  
482) *Syromastus rhombeus* (Linnaeus,1767) (Coreidae)

**Cydnidae**

- 483) *Canthophorus melanopterus* (Herrich-Schäffer,1835) (Cydnidae)  
484) *Cydnus* sp /or *Sehirus* sp. (Çerçi, pers. comm.) (Cydnidae), to be investigated.  
485) *Tritomegas sexmaculatus* (Rambur,1842) (Cydnidae)

**Gerridae**

- 486) *Gerris (s.str.) costae* (Herrich-Schäffer,1850) (Gerridae)

**Lygaeidae**

- 487) *Lygaeus equestris* (Linnaeus,1758) (Lygaeidae)  
488) *Melanocoryphus albomaculatus* (Goeze,1778) (Lygaeidae)  
489) *Rhyparochromus phoeniceus* (Rossi,1794) (Lygaeidae)  
490) *Spilostethus pandurus* (Scopoli,1763) (Lygaeidae)  
491) *Spilostethus saxatilis* (Scopoli,1763) (Lygaeidae)

**Miridae**

- 492) *Adelphocoris lineolatus* (Goeze,1778) (Miridae)  
493) *Deraeocoris rutilus* (Herrich-Schäffer,1838) (Miridae)  
494) *Deraeocoris serenus* Douglas & Scott,1868 (Miridae)  
495) *Lygus pratensis* (Linnaeus,1758) (Miridae)  
496) *Lygus rugulipennis* Poppius,1911 (Miridae)  
497) *Notostira elongata* (Geoffroy,1785) (Miridae)

**Nabidae**

- 498) *Nabis ferus* (Linnaeus,1758) (Nabidae)

**Pentatomidae**

- 499) *Ancyrosoma leucogrammes* (Gmelin,1790) (Pentatomidae)  
500) *Carpocoris (s.str.) coreanus* Distant,1899 (Pentatomidae)  
501) *Carpocoris (s.str.) fuscispinus* (Boheman,1851) (Pentatomidae)

- 502) *Carpocoris (s.str.) pudicus* (Poda,1761) (Pentatomidae)
- 503) *Cnephosa flavomarginata* Jakovlev,1880 (Pentatomidae)
- 504) *Derula flavoguttata* Mulsant & Rey,1856 (Pentatomidae)
- 505) *Dolycoris baccarum* (Linnaeus,1758) (Pentatomidae)
- 506) *Eurydema (Rubrodorsalium) ventralis* Kolenati,1846 (Pentatomidae)
- 507) *Eurydema* sp. (Çerçi, pers. comm.) (Pentatomidae)
- 508) *Eurydema (s.str.) ornatum* (Linnaeus,1758) (Pentatomidae)
- 509) *Graphosoma (s.str.) melanoxanthum* Horvath,1903 (Pentatomidae)
- 510) *Graphosoma (s.str.) semipunctatum* (Fabricius,1775) (Pentatomidae)
- 511) *Mustha spinosula* (Lefebvre,1831) (Pentatomidae)
- 512) *Neottiglossa leporina* (Herrich-Schäffer,1830) (Pentatomidae)
- 513) *Rhombocoris regularis* (Herrich-Schaeffer,1851) (Pentatomidae)
- 514) *Stagonomus (s.str.) amoenus* (Brullé,1832) (Pentatomidae)
- 515) *Tholagmus flavolineatus* (Fabricius,1798) (Pentatomidae)
- 516) *Zicrona caerulea* (Linnaeus,1758) (Pentatomidae)

### Reduviidae

- 517) **Unidentified species.** Egg cluster of an Assassin Bug (*Rhynocoris* sp.) from Artos Mountain was photographed by the first author (Figs. 23, 24). Previously, this species was illustrated by the authors during hunting (Koçak & Kemal, 2012: fig.13).



**Figs. 23, 24** – Left: A female of Assassin Bug, laying egg cluster on a leaf. Right: Enlarged eggs, M. Kemal (Cesa)

- 518) *Holotrichius apterus* Jakovlev,1879 (Reduviidae)
- 519) *Peirates hybridus* (Scopoli,1763) (Reduviidae)
- 520) *Reduvius personatus* (Linnaeus,1758) (Reduviidae)
- 521) *Rhynocoris punctiventris* Herrich-Schäffer,1846 (Reduviidae)
- 522) *Sphedanolestes lividigaster* (Mulsant & Rey,1852) (Reduviidae)

### Rhopalidae

- 523) *Chorosoma schillingi* Schummel,1829 (Rhopalidae)
- 524) *Corizus hyoscyami* (Linnaeus,1758) (Rhopalidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 25).
- 525) *Liorhyssus hyalinus* (Fabricius,1794) (Rhopalidae)
- 526) *Stictopleurus abutilon* (Rossi,1790) (Rhopalidae)

### Scutelleridae

- 527) *Eurygaster dilaticollis* Dohrn,1860 (Scutelleridae)
- 528) *Eurygaster integriceps* Puton,1886 (Scutelleridae)



- 529) *Odontotarsus purpureolineatus* (Rossi,1790) (Scutelleridae)  
 530) *Odontotarsus robustus* Jakovlev,1884 (Scutelleridae)

### Stenocephalidae

- 531) *Dicranocephalus agilis* (Scopoli,1763) (Stenocephalidae)

### Tingidae

- 532) *Catoplatus nigriceps* Horvath,1905 (Tingidae)

## Homoptera

### Cercopidae

- 533) *Aphrophora* sp. (Cercopidae). It seems different from *A. alni* (Fig. 25).



**Fig. 25** – *Aphrophora* sp. (Cercopidae), a variable species from Artos Mountain northern slope, Kavarsük 2000m, 24 7 2014, M. Kemal (Cesa)

### Cicadidae

- 534) *Cicadatra persica* Kirkaldy,1909 (Cicadidae)  
 535) *Tibicina serhadensis* Koçak & Kemal,2010 (Cicadidae). This species is very local and restricted to southern slopes of Artos Mountain. First author this species observed on 26 June 2014 (Fig. 26). Previously this species was reported and illustrated by the authors from Artos Mountain (Kemal & Koçak, 2010: fig. 15).

### Dictyopharidae

- 536) *Dictyophara (Euthremma) multireticulata* Mulsant & Rey, 1855 (Dictyopharidae). Yellowish fore-leg is remarkable (Fig. 27)



**Fig. 26** - *Tibicina serhadensis* (Cicadidae). Southern slopes of Artos Mountain, 2000m 26 6 2014. M. Kemal (Cesa)



**Fig. 27** - *Dictyophara multireticulata* (Dictyopharidae). Artos Mountain, 1960m 20 8 2012, M. Kemal (Cesa)

**Issidae**

- 537) **Unidentified species.** An issid was observed by the first author from Artos Mountain, alpine zone, 3000m. on 21 7 2013 (Kemal & Koçak, 2013b: p.31, fig.26).

**Planipennia****Ascalaphidae**

- 538) ***Bubopsis hamata* (Klug,1834)** (Ascalaphidae). A female with typical resting position was observed by the first author (**Fig. 28**).
- 539) ***Libelloides macaronius* (Scopoli,1763)** (Ascalaphidae). Previously, this species was illustrated by the authors resting (Koçak & Kemal, 2012: fig.16).



**Fig. 28** - *Bubopsis hamata* (Ascalaphidae), female. Artos Mountain, northern slopes 1960m, 31 7 2015, M. Kemal (Cesa)

**Mantispidae**

- 540) ***Mantispa styriaca* (Poda,1761)** (Mantispidae)

**Myrmeleonidae**

- 541) ***Palpares chrysopterus* Navas,1910** (Myrmeleonidae). This species was previously illustrated by the authors from Artos Mountain with the name combination "*Palpares turcicus*" (Koçak & Kemal, 2012: fig.17).
- 542) ***Palpares libelluloides* (Linnaeus,1764)** (Myrmeleonidae)



**Nemopteridae**

- 543) *Nemoptera sinuata* Olivier, 1811 (Nemopteridae)

**Diptera****Acroceridae**

- 544) *Acrocera (Acrocerina) sanguinea* Meigen, 1804 (Acroceridae). This record is new to the fauna of Turkey! Besides, it is the second acrocerid species recorded from Artos Mountain (Kemal & Koçak, 2014b) (Fig. 1).
- 545) *Ogcodes formosus* Loew, 1873 (Acroceridae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal, 2013a: figs. 1, 2) (Fig. 29).



**Fig. 29** – *Ogcodes formosus* (Acroceridae), East Turkey, Van Prov., Artos Mt., 1900m, 9 7 2012, M. Kemal (Cesa)

**Bombyliidae**

- 546) *Amictus* sp. (Bombyliidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal, 2013a: fig. 13)
- 547) *Bombylella atra* (Scopoli, 1763) (Bombyliidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal, 2013a: fig. 18)
- 548) *Callostoma fascipenne* Macquart, 1840 (Bombyliidae)
- 549) *Chalcochiton pallasii* (Loew, 1856) (Bombyliidae)
- 550) *Cyllenia rustica* (Rossi, 1790) (Bombyliidae)
- 551) *Exoprosopa ahtamara* Dils & Özbek, 2007 (Bombyliidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal, 2013a: fig. 27)
- 552) *Exoprosopa jacchus* (Fabricius, 1805) (Bombyliidae)

- 553) ***Exoprosopa pandora* (Fabricius,1805)** (Bombyliidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 30)
- 554) ***Exoprosopa pectoralis* Loew,1862** (Bombyliidae)
- 555) ***Hemipenthes velutina* (Meigen,1820)** (Bombyliidae)
- 556) ***Heteralonia (Acrodisca) suffusa* (Klug,1832)** (Bombyliidae)
- 557) ***Heteralonia (Homolonia) megerlei* (Meigen,1820)** (Bombyliidae)
- 558) ***Spogostylum isis* (Meigen,1820)** (Bombyliidae)
- 559) ***Toxophora fasciculata* (Villers,1789)** (Bombyliidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 44)

### Chloropidae

- 560) ***Thaumatomyia notata* (Meigen,1830)** (Chloropidae)

### Dolichopodidae

- 561) ***Hercostomus* sp.** [det. Grichanov] (Dolichopodidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 61)

### Lauxaniidae

- 562) ***Eusapromyza multipunctata* (Fallén,1820)** (Lauxaniidae)

### Muscidae

- 563) ***Muscina stabulans* (Fallén,1817)** (Muscidae)
- 564) ***Lispe nana* Macquart,1835** (Muscidae)

### Nemestrinidae

- 565) ***Neorhynchocephalus tauscheri* (Fischer,1812)** (Nemestrinidae)

### Opomyzidae

- 566) ***Geomyza tripunctata* Fallén,1823** (Opomyzidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 79)

### Platystomidae

- 567) ***Platystoma chrysotoxum* Hendel,1913** (Platystomidae)
- 568) ***Platystoma dimidiatum* Hendel,1913** (Platystomidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 85)

### Sarcophagidae

- 569) ***Sphenometopa bifasciata* (Brauer & Bergenstamm,1891)** (Sarcophagidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: figs. 91, 92)

### Stratiomyidae

- 570) ***Lasiopa* sp.** (Stratiomyidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 105)
- 571) ***Oxycera (Camptopelta) meigenii* Staeger,1844** (Stratiomyidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 115)

- 572) *Oxycera fallenii* Staeger,1844 (Stratiomyidae)  
 573) *Stratiomys ruficornis* (Macquart,1838) (Stratiomyidae)

### Syrphidae

- 574) *Chrysotoxum parmense* Rondani,1845 (Syrphidae)  
 575) *Eristalis (Eoseritalis) arbustorum* (Linnaeus,1758) (Syrphidae)  
 576) *Merodon distinctus* Palma,1863 (Syrphidae)  
 577) *Merodon velox* Loew,1869 (Syrphidae)  
 578) *Palumbia (s.str.) eristaloides* (Potschinsky,1887) (Syrphidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013a: fig. 146)

### Tabanidae

- 579) *Dasyrhamphis ater* (Rossi,1790) (Tabanidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 27).  
 580) *Pangonius (s.str.) pyritosus* Loew,1859 (Tabanidae)  
 581) *Theriopectes carabaghensis* (Potschinsky,1877) (Tabanidae)

### Tachinidae

- 582) *Cylindromyia (s.str.) brassicaria* (Fabricius,1775) (Tachinidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 29).  
 583) *Mintho rufiventris* (Fallén,1817) (Tachinidae)  
 584) *Tachina (Eudoromyia) fera* (Linnaeus,1761) (Tachinidae)  
 585) *Zophomyia temula* (Scopoli,1763) (Tachinidae)

### Tephritidae

The species were previously listed by the authors (Koçak & Kemal, 2013b).

- 586) *Acanthiophilus helianthi* (Rossi,1790) (Tephritidae)  
 587) *Campiglossa misella* (Loew,1869) (Tephritidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 28).  
 588) *Hypenidium* sp. (Tephritidae)  
 589) *Tephritis acanthiophilopsis* M.Hering,1937 (Tephritidae)  
 590) *Tephritis hurvitzi* Freidberg,1980 (Tephritidae)  
 591) *Tephritis postica* (Loew,1844) (Tephritidae)  
 592) *Tephritis* sp.?n. [det.V.Korneyev] (Tephritidae)  
 593) *Urophora impicta* (M.Hering,1942) (Tephritidae). This species was previous reported by the authors from Başet and Artos Mountains in Van Province (Koçak & Kemal, 2013b: 10, footnote 20).

### Ulidiidae

- 594) *Dorycera caucasica* Hendel,1910 (Ulidiidae). This species was previously recorded from Artos Mountain and illustrated by the authors (Koçak & Kemal,2013: fig. 177)

## Hymenoptera

### Andrenidae

- 595) *Andrena (Melandrena) cineraria* (Linnaeus,1758) (Andrenidae)



**Apidae**

- 596) *Anthophora (Mystacanthophora) borealis* Morawitz, 1864 (Apidae)
- 597) *Anthophora (Pyganthophora) aestivalis* (Panzer, 1801) (Apidae)
- 598) *Anthophora (s.str.) plumipes* (Pallas, 1772) (Apidae)
- 599) *Apis (s.str.) mellifera* Linnaeus, 1758 (Apidae)
- 600) *Bombus (Megabombus) armeniacus* (Radoszkowski, 1877) (Apidae)
- 601) *Bombus (Melanobombus) incertus* Morawitz, 1881 (Apidae)
- 602) *Bombus (Thoracobombus) laesus* Morawitz, 1875 (Apidae)
- 603) *Bombus (Thoracobombus) zonatus* Smith, 1854 (Apidae)
- 604) *Xylocopa (Coxopyla) iris* (Christ, 1791) (Apidae)
- 605) *Xylocopa (s.str.) violacea* (Linnaeus, 1758) (Apidae)

**Crabronidae**

- 606) *Philanthus triangulum* (Fabricius, 1775) (Crabronidae)
- 607) *Stizoides tridentatus* (Fabricius, 1775) (Crabronidae)
- 608) *Tachysphex* sp. (Crabronidae) The genus is represented in Turkey by 46 species (Koçak, 2014; Koçak & Kemal, 2015b) (Fig. 30).



**Fig. 30** – *Tachysphex* sp., Van Prov., Gevaş, Artos Mountain northern slopes, 1860m, 9 7 2012, M. Kemal (Cesa)

**Megachilidae**

- 609) *Anthidium (Rhodanthidium) superbum* Radoszkowski, 1876 (Megachilidae)
- 610) *Lithurgus cornutus* (Fabricius, 1787) (Megachilidae)

**Pompilidae**

- 611) *Anoplius viaticus* (Linnaeus, 1758) (Pompilidae)
- 612) *Batozonellus lacerticida* (Pallas, 1771) (Pompilidae)
- 613) *Cryptocheilus alternatus* (Lepeletier, 1845) (Pompilidae)

**Scoliidae**

- 614) *Scolia hirta* (Schrank,1781) (Scoliidae)

**Tenthredinidae**

- 615) *Tenthredo (Cephaledo) bifasciata* O.Müller,1766 (Tenthredinidae)

**Vespidae**

- 616) *Ceramius caucasicus* André,1884 (Vespidae)  
 617) *Dolichovespula sylvestris* (Scopoli,1763) (Vespidae)  
 618) *Polistes (s.str.) biglumis* (Linnaeus,1758) (Vespidae)  
 619) *Polistes (s.str.) gallicus* (Linnaeus,1767) (Vespidae)

**Coleoptera****Buprestidae**

- 620) *Capnodis marquardti* Reitter,1913 (Buprestidae)  
 621) *Capnodis tenebrionis* (Linnaeus,1761) (Buprestidae)

**Cerambycidae**

- 622) *Agapanthia (Synthapsia) kirbyi* (Gyllenhal,1817) (Cerambycidae)  
 623) *Cerambyx (s.str.) dux* (Faldermann,1837) (Cerambycidae)  
 624) *Mallosia (Eumallosia) herminae* (Reitter,1890) (Cerambycidae)  
 625) *Mallosia (Eumallosia) imperatrix* Abeille de Perrin,1885 (Cerambycidae)  
 626) *Mallosia (Eusemnosia) interrupta* (Pic,1905) (Cerambycidae)  
 627) *Osphranteria coerulescens* Redtenbacher,[1849] (Cerambycidae)  
 628) *Paraplagionotus floralis* (Pallas,1773) (Cerambycidae)  
 629) *Vadonia bitlisiensis* (Chevrolat,1882) (Cerambycidae)

**Chrysomelidae**

- 630) *Clytra (Clytraria) atraphaxidis* (Pallas,1773) (Chrysomelidae)  
 631) *Clytra (Clytraria) valeriana* Ménétériés,1832 (Chrysomelidae)  
 632) *Clytra (Coptocephala) gebleri* Gebler,1841 (Chrysomelidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 38).  
 633) *Clytra (Coptocephala) unifasciata* (Scopoli,1763) (Chrysomelidae)  
 634) *Clytra (s.str.) aliena* Weise,1897 (Chrysomelidae)  
 635) *Clytra (s.str.) laeviuscula* (Ratzeburg,1837) (Chrysomelidae)  
 636) *Labidostomis (s.str.) senicula* Kraatz,1872 (Chrysomelidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 39).  
 637) *Tituboea macropus* (Illiger,1800) (Chrysomelidae)

**Cleridae**

- 638) *Trichodes suspectus* Escherich,1892 (Cleridae)  
 639) *Trichodes dilatipennis* Reitter,1893 (Cleridae)  
 640) *Trichodes quadriguttatus* Adams,1817 (Cleridae)

**Coccinellidae**

- 641) *Coccinella (s.str.) septempunctata* Linnaeus,1758 (Coccinellidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 37).

**Curculionidae**

- 642) *Larinus onopordi* (Fabricius, 1787) (Curculionidae)

**Glaphyridae**

- 643) *Amphicoma (Eulasia) arctos* (Pallas, 1781) (Glaphyridae)  
 644) *Amphicoma (Pygopleurus) vulpes* (Fabricius, 1781) (Glaphyridae)

**Meloidae**

- 645) *Mylabris (Eumylabris) fabricii* Sumakov, 1924 (Meloidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 31).  
 646) *Mylabris (Micrabris) sp.* (Meloidae). Probably an alpine species. Previously recorded by the authors (Kemal & Koçak, 2013b: figs. 33-36).  
 647) *Mylabris (s.str.) variabilis* (Pallas, 1781) (Meloidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 32).

**Scarabaeidae**

- 648) *Cetonia (s.str.) aurata* (Linnaeus, 1761) (Scarabaeidae)  
 649) *Anisoplia sp.* (Scarabaeidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 40).  
 650) *Oxythyrea cinctella* (Schaum, 1841) (Scarabaeidae)  
 651) *Protaetia (Netocia) trojana* (Gory & Percheron, 1833) (Scarabaeidae)  
 652) *Sisyrphus schaefferi* (Linnaeus, 1758) (Scarabaeidae)  
 653) *Tropinota (Epicometis) hirta* (Poda, 1761) (Scarabaeidae)

**Tenebrionidae**

- 654) *Cteniopus (s.str.) sulphureus* (Linnaeus, 1758) (Tenebrionidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 41).  
 655) *Pimelia sp.* (Tenebrionidae). Previously recorded by the authors (Kemal & Koçak, 2013b: fig. 42).

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